



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,769	03/09/2000	Peter C Johnson	99-40165-US	3731

7590

04/09/2002

LOUIS M. HEIDELBERGER, ESQUIRE  
2500 ONE LIBERTY PLACE  
1650 MARKET STREET  
PHILADELPHIA, PA 19103

EXAMINER

MARSCHER, ARDIN H

ART UNIT PAPER NUMBER

1631

DATE MAILED: 04/09/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/521,769

Applicant(s)  
Johnson

Examiner  
Ardin Marschel

Art Unit  
1631



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov 29, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above, claim(s) 10-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-42 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) 2 ~~pages~~ (1 sheet)
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Applicants' arguments, filed 11/29/01, have been fully considered and they are deemed to be persuasive to overcome the previous rejections of record. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are newly applied. They constitute the complete set presently being applied to the instant application.

Applicant is hereby notified that the required timing for the correction of drawings has changed. See the last 6 lines on the sheet which is attached entitled "Attachment for PTO-948 (Rev. 03/01 or earlier)". Due to the above notification Applicant is required to submit drawing corrections within the time period set for responding to this Office action. Failure to respond to this requirement may result in abandonment of the instant application or a notice of a failure to fully respond to this Office action.

Claims 1-9 are rejected, as discussed below, under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, step (c), a uniform quality end product is cited as resulting from the application of a given set of product processing data to raw product. Confusingly, in step (e), the raw product is selected so that "when processed under a given set

of processing parameters" a uniform quality end product results. In this last phrase the antecedent basis for "a given set of processing parameters" is vague and indefinite in that it does not refer back to any in step (c) of claim 1. Does applicant intend that once a raw product is provided with records as in step (c) and then determined in step (d) that any set of processing parameters in step (e) will predict or result in a uniform quality end product? The connection therefore between steps (c) and (e) is unclear as to whether step (e) requires any parameter from step (c) or not. Clarification via clearer claim wording is requested. Dependent claims from claim 1 are included in this rejection due to their dependence from claim 1 directly or indirectly.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5-9 are rejected under 35 U.S.C. § 102(a) or (b)) as being clearly anticipated by Chtioui et al. (already of

record).

The year of publication of Chtioui et al. is 1998 without being submitted with a month and/or day of publication. Thus, this reference either supports a 102(a) or 102(b) rejection depending on whether it is published less than or more than one year before the instant priority document, filed Sept. 7, 1999. Applicants are requested to submit a more defined date of publication for this reference in order to resolve this issue. In either case Chtioui et al. is reasonably interpreted as a prior art reference against the above listed instant claims. As summarized in the abstract a genetic algorithm is utilized to categorize seeds from plants (instant claim 2) into various types. On page 85, first column, lines 9 and 10, the genetic algorithm is stated as being based on the selection of the best individuals for reproduction. Such individuals are reasonably interpreted as have the uniform characteristic as being best for reproduction. Such a product characteristic is also a requirement of the instant claims. The steps in this process of the reference leading up to this best reproductive character are given in the reference as follows. On page 80, "Sample collection" describes the instant step (a) as obtaining a raw product which are seeds. The "Image acquisition" section on page 80 then analyzes the seeds via an image system (instant claim 3) in conjunction with the "Feature measurement" section on pages

80-81 anticipates instant step (b) of claim 1. The "Genetic algorithm" on page 81 further analyzes chromosomal characteristics of the seeds. The "Seed appearance" section on page 82 supplies a plurality of product processing feature range set records for various seed types as required in instant step (c). The remainder of said step (c) is described on pages 82-86 wherein features are compared in order to define those seed products which fall within a particular product seed type. These features are then determined in order to determine the suitability of each seed regarding its seed type as also required as a determination in instant step (d) of claim 1. The seeds are then selected as to seed type if the characteristics match as also required in instant claim 1, step e), and further evaluated as to the percentage of misclassification, although not required in the instant claims. The limitations of instant claims 5 and 6 are anticipated in that plant phenomics or microphenomics are viewed as generic terms directed to phenotyping which deemed characteristics that can be imaged as noted above. Similarly, claims 7-9 are interpreted as being directed to generic biofeature analysis as described above via seed characterization. These disclosures anticipate the above listed instant claims.

No claim is allowed.

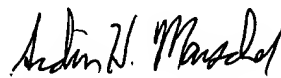
Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703)308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703)305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

April 5, 2002

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER